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EXAMINER

FOWLKES, ANDRE R

ART UNIT	PAPER NUMBER
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2122

DATE MAILED: 04/22/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/752,664

Applicant(s)

SULLIVAN, GARY E.

Examiner

Andre R. Fowlkes

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/4/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 & 17-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment filed on 03/04/04.
2. The objection to the drawings under 37 CFR 1.84(p)(5) is withdrawn in view of applicants amendment.
3. The objections to the specification are withdrawn in view of applicants amendment.
4. The objection to claim 9 is withdrawn in view of applicants amendment.
5. The rejection under 35 USC 112, second paragraph, is withdrawn in view of applicants amendment.
6. Claims 1, 7, 9, 13, and 17 have been amended.
7. Claims 15 and 16 have been canceled.
8. Claims 18 and 19 have been added.
9. Claims 1-14 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lea, International Publication Number WO 99/35753 (Art of Record) in view of Ludtke, U.S. Patent No. 6,237,049, in further view of Van Der Meulen et al (Van Der Meulen), International Publication Number WO 99/4969 (Art of Record).

Claim Objections

10. Claim 1 is objected to because of the following informalities: The definition for the acronym HAVi is not specified in the claims. Please include the full definition, -- Home Audio Video Interoperability--, at least once in the claims, since acronyms tend to change over time. Appropriate correction is required.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-14 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lea, International Publication Number WO 99/35753 (Art of Record) in view of Ludtke, U.S. Patent No. 6,237,049, in further view of Van Der Meulen et al (Van Der Meulen), International Publication Number WO 99/4969 (Art of Record).

As per claim 1, Lea discloses:

- **A system for providing extended functionality for a HAVi compatible device**, (p. 4 lines 3-5, "The present invention further provides a system and method within a home audio/visual network that allows for expanded functionality for set-top-box applications"), **the HAVi compatible device being connectable to a HAVi network**, (p. 4 lines 13-14, "the communication architecture used is the home audio/visual initiative (HAVI) format"), **the extended functionality defined by control data stored on a remote server external to the HAVi network, the remote server being connected to an external network, the external network comprising a network external to the HAVi network**, (p. 5 lines 9-15, "Some devices such as a set-top-box

... or digital television act as both devices in the home network, communicating with other devices, and as gateways to external service providers (e.g., the internet, digital TV provider, cable provider, etc.) outside of the home ... it is possible to download one or more application programs (control data) from a service provider that are run on the set-top-box. The application program generally is intended to provide some features or services to the home network.”).

- an external network connection device for providing data communications between the HAVi network and the remote server; the external network connection device connectable to the external network, (p. 5 lines 9-12, “Some devices such as a set-top-box ... or digital television act as both devices in the home network, communicating with other devices, and as gateways to external service providers (e.g., the internet, digital TV provider, cable provider, etc.) outside of the home”).

- the external network connection device for receiving the control data, (p. 5 lines 13-14, “In the set-top-box of the present invention it is possible to download one or more application programs (control data)”).

- a control module for providing the extended functionality for the HAVi compatible device based on the control data, (p. 6 lines 1-3, “The downloaded application is then provided with a mechanism to send requests to the DCM that are used to interact and control the actual devices of the home network”).

Lea doesn't explicitly disclose that **the HAVi compatible device comprises a disk player not having built in ability for presenting content information for a disk inserted into the disk player.**

However, Ludtke, in an analogous environment, discloses that **the HAVi compatible device comprises a disk player not having built in ability for presenting content information for a disk inserted into the disk player**, (abstract lines 2-13, "The present invention operates within a network of consumer electronic media devices (such as) television ... compact disk device ... increasing their original capabilities", and col. 2 lines 53 – 67, "it would be advantageous to provide a method and system that enables new functionality to be provided in the field to existing consumer electronic media devices networked together by the IEEE 1394 serial communication bus ... the present invention provides these advantages").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ludtke into the system of Lea so that **the HAVi compatible device comprises a disk player not having built in ability for presenting content information for a disk inserted into the disk player.** The modification would have been obvious because one of ordinary skill in the art would want to display the usefulness of their invention by extending the functionality of a common legacy device, in this case, a compact disk player not having the ability for presenting artist and song information for a compact disk.

Lea further doesn't explicitly disclose that **the control data is for presenting content information about content on the disk to the user.**

However, Van Der Meulen, in an analogous environment, discloses that **the control data is for presenting content information about content on the disk to the user**, (p. 6 line 32 – p. 7 line 4, “the unique identifier that is associated with commercial CDs ... (is provided) to the information source ... to obtain detailed (content) information regarding each commercial CD, such as title, performer, etc”).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Van Der Meulen into the system of Lea so that **the control data is for presenting content information about content on the disk to the user**. The modification would have been obvious because one of ordinary skill in the art would want to use the control data to get up-to-date functionality from their existing CD player, without having to purchase a new, up-to-date CD player.

As per claim 2, the rejection of claim 1 is incorporated and further Lea discloses that **the control module comprises a functional control module**, (p. 5 lines 6-7, “A DCM or device control module is the software abstraction used by the present invention to control devices within the home audio/video network”, and a DCM code unit contains the DCMs and functional control modules (FCMs) for a device).

As per claim 3, the rejection of claim 2 is incorporated and further, Lea discloses that **the control module further comprises a device control module**, (p. 5 lines 6-7,

“A DCM or device control module is the software abstraction used by the present invention to control devices within the home audio/video network”).

As per claim 4, the rejection of claim 3 is incorporated and further, Lea discloses that **the device control module comprises a processor connected to the HAVi network, the processor having a memory module for storing the device control module; the processor further comprising the external network connection device** (Figure 17B, shows a device with a processor that is connected to the HAVi network, a memory device that contains the DCMs, and an external network connection).

As per claim 5, the rejection of claim 4 is incorporated and further Lea doesn't explicitly discloses that **the processor is for presenting the device control module to a user of the HAVi network for providing the user with the capability of controlling the HAVi compatible device with the extended functionality.**

However, Ludtke, in analogous environment, discloses that **the processor is for presenting the device control module to a user of the HAVi network for providing the user with the capability of controlling the HAVi compatible device with the extended functionality**, (figure 2a shows the proxy device which contains a processor, and col. 3 lines 26 – 28, “The proxy device can extend the existing functionality of devices as well as provide new functionality for them”).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ludtke into the system

of Lea so that **the processor is for presenting the device control module to a user of the HAVi network for providing the user with the capability of controlling the HAVi compatible device with the extended functionality.** The modification would be obvious because one of ordinary skill in the art would want to provide the device control module (DCM), from a processor so that the processor can provide access to the DCM ,in such a way, that the DCM can be used and shared without corruption.

As per claim 6, the rejection of claim 1 is incorporated and further Lea doesn't explicitly disclose that **the HAVi compatible device comprises a legacy device wherein the extended functionality is for causing the HAVi compatible device to function as a contemporary device with respect to a user of the HAVi network.**

However, Ludtke, in an analogous environment discloses that **the HAVi compatible device comprises a legacy device wherein the extended functionality is for causing the HAVi compatible device to function as a contemporary device with respect to a user of the HAVi network,** (col. 2 lines 53 – 67, “it would be advantageous to provide a method and system that enables new functionality to be provided in the field to existing (legacy) consumer electronic media devices networked together by the IEEE 1394 serial communication bus ... the present invention provides these advantages”).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ludtke into the system of Lea so that **the HAVi compatible device comprises a legacy device wherein the**

extended functionality is for causing the HAVi compatible device to function as a contemporary device with respect to a user of the HAVi network. The modification would be obvious because one of ordinary skill in the art would want to get contemporary functionality from their existing legacy devices without having to purchase new, up-to-date devices.

As per claim 7, the rejection of claim 1 is incorporated and further Lea doesn't explicitly disclose that **the disk player of the HAVi compatible device comprises a compact disk player not having built in ability for presenting artist and song information for a compact disk inserted into the compact disk player.**

However, Ludtke, in an analogous environment, discloses that **the disk player of the HAVi compatible device comprises a compact disk player not having built in ability for presenting artist and song information for a compact disk inserted into the compact disk player**, (abstract lines 2-13, "The present invention operates within a network of consumer electronic media devices (such as) television ... compact disk device ... increasing their original capabilities", and col. 2 lines 53 – 67, "it would be advantageous to provide a method and system that enables new functionality to be provided in the field to existing consumer electronic media devices networked together by the IEEE 1394 serial communication bus ... the present invention provides these advantages").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ludtke into the system

of Lea so that **the disk player of the HAVi compatible device comprises a compact disk player not having built in ability for presenting artist and song information for a compact disk inserted into the compact disk player.** The modification would have been obvious because one of ordinary skill in the art would want to display the usefulness of their invention by extending the functionality of a common legacy device, in this case, a compact disk player not having the ability for presenting artist and song information for a compact disk.

Lea further doesn't explicitly disclose that **the content information comprises artist and song information for the compact disk.**

However, Van Der Meulen, in an analogous environment, discloses that **the content information comprises artist and song information for the compact disk,** (p. 6 line 32 – p. 7 line 4, "the unique identifier that is associated with commercial CDs ... (is provided) to the information source ... to obtain detailed (content) information regarding each commercial CD, such as title, performer, etc").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Van Der Meulen into the system of Lea so that **the content information comprises artist and song information for the compact disk.** The modification would have been obvious because one of ordinary skill in the art would want to use the control data to get up-to-date functionality from their existing CD player, without having to purchase a new, up-to-date CD player.

As per claim 8, the rejection of claim 7 is incorporated and further Lea doesn't explicitly disclose that **the control data comprises artist and song information matched to one or more identification codes read from the compact disk such that the artist and song information may be presented to the user for selection.**

However, Van Der Meulen, in an analogous environment, discloses that **the control data comprises artist and song information matched to one or more identification codes read from the compact disk such that the artist and song information may be presented to the user for selection**, (p. 6 line 31 – p. 7 line 2, "If the content source is a CD or DVD, the material 311 includes the unique identifier that is associated with commercial CDs ... the receiver provides the identification to the information source ... (to) obtain detailed information regarding each commercial CD, such as title, performer, etc").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Van Der Meulen into the system of Lea so that **the control data comprises artist and song information matched to one or more identification codes read from the compact disk such that the artist and song information may be presented to the user for selection**

The modification would have been obvious because one of ordinary skill in the art would want a simple and universal technique to such that artist and song information may be presented to the user for selection.

As per claim 9, Lea discloses:

- **a system comprising a first usable device comprising one of a plurality usable devices capable of being connected to a local network, each usable device being capable of receiving commands from a user of the local network**, (p. 4 lines 9-13, "Several consumer electronics products (usable devices) ...can be coupled within the network to communicate together via a standard bus... This allows devices of the network to control one another and obtain information regarding one another").

- **an external network connection device for providing data communications between the local network and a remote server connected to an external network, the external network connection device connectable to the external network**, (figure 17B shows an external network connection providing data communications between the local network and an external network), **the external network connection device for receiving control data from the remote server, the control data defining extended functionality for a first of the one or more of the plurality of usable devices**, (p. 5 lines 13 – 15, "it is possible to download one or more application programs from a service provider that are run on the set-top-box. The application program generally is intended to provide some features or services to the home network").

- **a control module for providing the extended functionality for the first usable device based on the control data** (p. 6 lines 1-3, "The downloaded application is then provided with a mechanism to send requests to the DCM that are used to interact and control the actual devices of the home network").

Lea doesn't explicitly disclose that **the control data comprises content information retrieved from the remote server about content stored on a medium located on the first usable device, and that the extended functionality comprising a capability of the first usable device to present the content information on the first usable device.**

However, Van Der Meulen, in an analogous environment, discloses that **the control data comprises content information retrieved from the remote server about content stored on a medium located on the first usable device, and that the extended functionality comprising a capability of the first usable device to present the content information on the first usable device,** (p. 6 line 31 – p. 7 line 4, "If the content source is a CD or DVD (i.e. the medium located on the first usable device), the material 311 includes the unique identifier that is associated with commercial CDs ... the receiver provides the identification to the information source ... to access an Internet site (i.e. remote server) to obtain detailed (content) information regarding each commercial CD (and presenting the content information on the first usable device)").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Van Der Meulen into the system of Lea so that that **the control data comprises content information retrieved from the remote server about content stored on a medium located on the first usable device, and that the functionality comprising a capability of the**

first usable device to present the content information on the first usable device.

The modification would have been obvious because one of ordinary skill in the art would want to economically store all of the content information in one remote server while allowing many devices to access the information, and the convenience of viewing the content information without removing the medium from the first usable device.

As per claim 10, the rejection of claim 9 is incorporated and further Lea discloses that **a second of the usable devices comprises a processor having a device control module** (figure 17B shows a usable device with a processor and a device control module (DCM)).

As per claim 11, the rejection of claim 10 is incorporated and further Lea discloses that **the device control module comprises a first functional control module**, (p. 5 lines 6-7, "A DCM or device control module is the software abstraction used by the present invention to control devices within the home audio/video network", and a DCM code unit contains the DCMs and functional control modules (FCMs) for a device), **the device control module for presenting the extended functionality to a user of the processor for controlling the first usable device, thereby allowing the user to use the extended functionality**, (p. 6 lines 1-3, "The downloaded application (extended functionality) is then provided with a mechanism to send requests to the DCM that are used to interact and control the actual devices of the home network").

As per claim 12, the rejection of claim 10 is incorporated and further Lea doesn't explicitly disclose that **the extended functionality comprises a plurality of extended functions for controlling the first usable device; two or more device control modules each comprising a plurality of functional control modules, each functional control module comprising a subset of the plurality of extended functions, the plurality of usable devices comprising two or more processors, each of the device control modules for presenting selectively to one of the two or more processors, thereby allowing a user of each of the two or more processors to control the first device based on the respective subset of extended functions of the respective functional control modules of the device control module presented to the respective processor.**

However, Ludtke, in an analogous environment, discloses that **the extended functionality comprises a plurality of extended functions for controlling the first usable device**, (col. 3 lines 26 – 28, "The proxy device can extend the existing functionality of devices as well as provide new functionality for them), **two or more device control modules each comprising a plurality of functional control modules, each functional control module comprising a subset of the plurality of extended functions**, (col. 22 lines 30-33, "(a) proxy service ... (has) control over HAVi devices", and proxy devices use device control modules (DCMs) to facilitate control over HAVi devices. A DCM code unit contains the functional control modules (FCMs) for a device, (col. 22 line 36, "(each FCM is responsible for) "controlling one subunit of functionality"), **the plurality of usable devices comprising two or more processors,**

each of the device control modules for presenting selectively to one of the two or more processors, thereby allowing a user of each of the two or more processors to control the first device based on the respective subset of extended functions of the respective functional control modules of the device control module presented to the respective processor, (Figure 2A shows that each proxy device contains a processor. Figure 2C shows a usable device, Set-Top-Box 13, that contains two proxies. And proxies contain multiple DCMs that are used to provide device specific functionality).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ludtke into the system of Lea so that **the extended functionality comprises a plurality of extended functions for controlling the first usable device; two or more device control modules each comprising a plurality of functional control modules, each functional control module comprising a subset of the plurality of extended functions, the plurality of usable devices comprising two or more processors, each of the device control modules for presenting selectively to one of the two or more processors, thereby allowing a user of each of the two or more processors to control the first device based on the respective subset of extended functions of the respective functional control modules of the device control module presented to the respective processor.** The modification would have been obvious because one of ordinary skill in the art would want to use devices with multiple

processors in order to have access to multiple extended functions, of as many devices as possible, simultaneously.

As per claim 13, Lea discloses:

- **A method for providing extended functionality for a HAVi compatible device**, (p. 4 lines 3-5, "The present invention further provides a system and method within a home audio/visual network that allows for expanded functionality for set-top-box applications"), **the HAVi compatible device being connectable to a HAVi network**, (p. 4 lines 13-14, "the communication architecture used is the home audio/visual initiative (HAVI) format"), **the extended functionality defined by control data stored on a remote server external to the HAVi network, the remote server being connected to an external network, the external network comprising a network external to the HAVi network**, (p. 5 lines 9-15, "Some devices such as a set-top-box ... or digital television act as both devices in the home network, communicating with other devices, and as gateways to external service providers (e.g., the internet, digital TV provider, cable provider, etc.) outside of the home ... it is possible to download one or more application programs (control data) from a service provider that are run on the set-top-box. The application program generally is intended to provide some features or services to the home network.").

- **providing data communications between the HAVi network and the remote server**, (p. 5 lines 9-12, "Some devices such as a set-top-box ... or digital television act as both devices in the home network, communicating with other devices,

and as gateways to external service providers (e.g., the internet, digital TV provider, cable provider, etc.) outside of the home”).

-receiving the control data from the remote server; and providing the extended functionality for the HAVi compatible device based on the control data,
(p.5 lines 14 – 20, “The application program generally is intended to provide some features (extended functionality) or services to the home network ... the present invention allows the creation of downloadable applications that are transmitted from a service provider ... to the consumer premises”).

Lea doesn't explicitly disclose that:

- the HAVi compatible device comprises a legacy device wherein the extended functionality is for causing the HAVi compatible device to function as a contemporary device with respect to a user of the HAVi network;

However, Ludtke, in an analogous environment discloses that **the HAVi compatible device comprises a legacy device wherein the extended functionality is for causing the HAVi compatible device to function as a contemporary device with respect to a user of the HAVi network,** (col. 2 lines 53 – 67, “it would be advantageous to provide a method and system that enables new functionality to be provided in the field to existing (legacy) consumer electronic media devices networked together by the IEEE 1394 serial communication bus ... the present invention provides these advantages”).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ludtke into the system of Lea so that **the HAVi compatible device comprises a legacy device wherein the extended functionality is for causing the HAVi compatible device to function as a contemporary device with respect to a user of the HAVi network.**

The modification would be obvious because one of ordinary skill in the art would want to get contemporary functionality from their existing legacy devices without having to purchase new, up-to-date devices.

Additionally, Lea doesn't explicitly disclose that:

- the HAVi compatible device comprises a compact disk player not having built in ability for presenting artist and song information for a compact disk inserted into the compact disk player.

However, Ludtke, in an analogous environment, discloses that **the HAVi compatible device comprises a compact disk player not having built in ability for presenting artist and song information for a compact disk inserted into the compact disk player**, (abstract lines 2-13, "The present invention operates within a network of consumer electronic media devices (such as) television ... compact disc device ... increasing their original capabilities", and col. 2 lines 53 – 67, "it would be advantageous to provide a method and system that enables new functionality to be provided in the field to existing consumer electronic media devices networked together

by the IEEE 1394 serial communication bus ... the present invention provides these advantages”).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ludtke into the system of Lea so that **the HAVi compatible device comprises a compact disk player not having built in ability for presenting artist and song information for a compact disk inserted into the compact disk player.** The modification would have been obvious because one of ordinary skill in the art would want to display the usefulness of their invention by extending the functionality of a common legacy device, in this case, a compact disk player not having the ability for presenting artist and song information for a compact disk.

Lea further doesn't explicitly disclose that **the control data is for presenting artist and song information for the compact disk to the user.**

However, Van Der Meulen, in an analogous environment, discloses that **the control data is for presenting artist and song information for the compact disk to the user**, (p. 6 line 32 – p. 7 line 4, “the unique identifier that is associated with commercial CDs ... (is provided) to the information source ... to obtain detailed information regarding each commercial CD, such as title, performer, etc”).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Van Der Meulen into the system of Lea so that **the control data is for presenting artist and song**

information for the compact disk to the user. The modification would have been obvious because one of ordinary skill in the art would want to use the control data to get up-to-date functionality from their existing CD player, without having to purchase a new, up-to-date CD player.

As per claim 14, the rejection of claim 13 is incorporated and further Lea discloses **providing the user with the capability of controlling the HAVi compatible device with the extended functionality**, (p. 5 lines 22-23, “ the present invention provides a generic method of making available services and devices that are present in the network”, and the devices include the set-top-box which is a HAVi compatible device with extended functionality).

As per claim 17, the rejection of claim 13 is incorporated and further Lea doesn't explicitly disclose **reading one or more identification codes from the compact disk and matching the one or more identification codes with the control data to present the artist and song information such that the artist and song information may be presented to the user for selection based on the identification code.**

However, Van Der Meulen, in an analogous environment, discloses **reading one or more identification codes from the compact disk and matching the one or more identification codes with the control data to present the artist and song information such that the artist and song information may be presented to the user for selection based on the identification code**, (p. 6 line 31 – p. 7 line 4, “If the

content source is a CD or DVD, the material 311 includes the unique identifier that is associated with commercial CDs ... the receiver provides the identification to the information source ... (to) obtain detailed information regarding each commercial CD, such as title, performer, etc. Alternatively a user can enter such information, or provide direction to the other sources of information regarding this material").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Van Der Meulen into the system of Lea to allow **reading one or more identification codes from the compact disk and matching the one or more identification codes with the control data to present the artist and song information such that the artist and song information may be presented to the user for selection based on the identification code**. The modification would have been obvious because one of ordinary skill in the art would want the convenience of being able to select an artist or song based on the identification code.

As per claim 18, the rejection of claim 13 is incorporated and further, Lea doesn't explicitly disclose:

- **reading an identification code from the compact disk by the legacy device;**
- **providing the identification code to a control module for the legacy device;**
- **forwarding the identification code to the remote server;**

- **matching the identification code from the compact disk to an identification code in a control data record on the remote server;**
- **transmitting artist and song information for the compact disk from the control data record to the control module;**
- **presenting the artist and song information to the user.**

However, Van Der Meulen, in an analogous environment, discloses:

- **reading an identification code from the compact disk by the legacy device**
(p. 6 line 31 – p. 7 line 4, “If the content source is a CD or DVD, the material 311 includes the unique identifier that is (read from the compact disk by the legacy device)”).

- **providing the identification code to a control module for the legacy device**
(p. 6 line 31 – p. 7 line 4, the receiver (uses a control module to) provides the identification to the information source ... (to) obtain detailed information regarding each commercial CD, such as title, performer, etc.”).

- **forwarding the identification code to the remote server** (p. 6 line 31 – p. 7 line 4, “the identification can be used to access an Internet site (i.e. remote server) to obtain detailed information regarding each commercial CD, such as title, performer, etc”).

- **matching the identification code from the compact disk to an identification code in a control data record on the remote server** (p. 6 line 31 – p. 7 line 4, “the identification can be used to access an Internet site (i.e. remote server) to

obtain detailed information regarding each commercial CD, such as title, performer, etc.”).

- transmitting artist and song information for the compact disk from the control data record to the control module (p. 6 line 31 – p. 7 line 4, “If the content source is a CD or DVD, the material 311 includes the unique identifier that is associated with commercial CDs ... the receiver provides the identification to the information source ... (to) obtain detailed information regarding each commercial CD, such as title, performer, etc. Alternatively a user can enter such information, or provide direction to the other sources of information regarding this material”).

- presenting the artist and song information to the user (p. 6 line 31 – p. 7 line 4, “obtain(ing) detailed information regarding each commercial CD, such as title, performer, etc. (and presenting it to the user)”).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Van Der Meulen into the system of Lea to allow:

- reading an identification code from the compact disk by the legacy device;

- providing the identification code to a control module for the legacy device;

- forwarding the identification code to the remote server;

- **matching the identification code from the compact disk to an identification code in a control data record on the remote server;**
- **transmitting artist and song information for the compact disk from the control data record to the control module;**
- **presenting the artist and song information to the user.**

The modification would have been obvious because one of ordinary skill in the art would want the convenience of being able to view artist and song information without removing the CD from the device.

As per claim 19, the rejection of claim 1 is incorporated and further Lea discloses that **the control module comprises a functional control module**, (p. 5 lines 6-7, "A DCM or device control module is the software abstraction used by the present invention to control devices within the home audio/video network", and a DCM code unit contains the DCMs and functional control modules (FCMs) for a device), and **further comprises a device control module**, (p. 5 lines 6-7, "A DCM or device control module is the software abstraction used by the present invention to control devices within the home audio/video network"), and that **the device control module comprises a processor connected to the HAVi network, the processor having a memory module for storing the device control module; the processor further comprising the external network connection device** (Figure 17B, shows a device with a processor that is connected to the HAVi network, a memory device that contains the DCMs, and an external network connection).

Lea doesn't explicitly disclose that **the processor is for presenting the device control module to a user of the HAVi network for providing the user with the capability of controlling the HAVi compatible device with the extended functionality.**

However, Ludtke, in analogous environment, discloses that **the processor is for presenting the device control module to a user of the HAVi network for providing the user with the capability of controlling the HAVi compatible device with the extended functionality**, (figure 2a shows the proxy device which contains a processor, and col. 3 lines 26 – 28, "The proxy device can extend the existing functionality of devices as well as provide new functionality for them").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ludtke into the system of Lea so that **the processor is for presenting the device control module to a user of the HAVi network for providing the user with the capability of controlling the HAVi compatible device with the extended functionality.** The modification would be obvious because one of ordinary skill in the art would want to provide the device control module (DCM), from a processor so that the processor can provide access to the DCM ,in such a way, that the DCM can be used and shared without corruption.

Additionally, Lea doesn't explicitly disclose that **the HAVi compatible device comprises a legacy device wherein the extended functionality is for causing the**

HAVi compatible device to function as a contemporary device with respect to a user of the HAVi network.

However, Ludtke, in an analogous environment discloses that **the HAVi compatible device comprises a legacy device wherein the extended functionality is for causing the HAVi compatible device to function as a contemporary device with respect to a user of the HAVi network**, (col. 2 lines 53 – 67, “it would be advantageous to provide a method and system that enables new functionality to be provided in the field to existing (legacy) consumer electronic media devices networked together by the IEEE 1394 serial communication bus ... the present invention provides these advantages”).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ludtke into the system of Lea so that **the HAVi compatible device comprises a legacy device wherein the extended functionality is for causing the HAVi compatible device to function as a contemporary device with respect to a user of the HAVi network**. The modification would be obvious because one of ordinary skill in the art would want to get contemporary functionality from their existing legacy devices without having to purchase new, up-to-date devices.

Additionally, Lea doesn't explicitly disclose that **the disk player of the HAVi compatible device comprises a compact disk player not having built in ability for**

presenting artist and song information for a compact disk inserted into the compact disk player.

However, Ludtke, in an analogous environment, discloses that **the disk player of the HAVi compatible device comprises a compact disk player not having built in ability for presenting artist and song information for a compact disk inserted into the compact disk player**, (abstract lines 2-13, "The present invention operates within a network of consumer electronic media devices (such as) television ... compact disk device ... increasing their original capabilities", and col. 2 lines 53 – 67, "it would be advantageous to provide a method and system that enables new functionality to be provided in the field to existing consumer electronic media devices networked together by the IEEE 1394 serial communication bus ... the present invention provides these advantages").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Ludtke into the system of Lea so that **the disk player of the HAVi compatible device comprises a compact disk player not having built in ability for presenting artist and song information for a compact disk inserted into the compact disk player**. The modification would have been obvious because one of ordinary skill in the art would want to display the usefulness of their invention by extending the functionality of a common legacy device, in this case, a compact disk player not having the ability for presenting artist and song information for a compact disk.

Lea further doesn't explicitly disclose that **the control data is for presenting artist and song information for the compact disk to the user.**

However, Van Der Meulen, in an analogous environment, discloses that **the control data is for presenting artist and song information for the compact disk to the user**, (p. 6 line 32 – p. 7 line 4, “the unique identifier that is associated with commercial CDs ... (is provided) to the information source ... to obtain detailed information regarding each commercial CD, such as title, performer, etc”).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Van Der Meulen into the system of Lea so that **the control data is for presenting artist and song information for the compact disk to the user.** The modification would have been obvious because one of ordinary skill in the art would want to use the control data to get up-to-date functionality from their existing CD player, without having to purchase a new, up-to-date CD player.

Additionally, Lea further doesn't explicitly disclose that **the control data comprises artist and song information matched to one or more identification codes read from the compact disk such that the artist and song information may be presented to the user for selection.**

However, Van Der Meulen, in an analogous environment, discloses that **the control data comprises artist and song information matched to one or more identification codes read from the compact disk such that the artist and song**

information may be presented to the user for selection (p. 6 line 31 – p. 7 line 4, “If the content source is a CD or DVD, the material 311 includes the unique identifier that is associated with commercial CDs ... the receiver provides the identification to the information source ... (to) obtain detailed information regarding each commercial CD, such as title, performer, etc (to user to enable selection)”).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Van Der Meulen into the system of Lea to allow **the control data comprises artist and song information matched to one or more identification codes read from the compact disk such that the artist and song information may be presented to the user for selection.** The modification would have been obvious because one of ordinary skill in the art would want the convenience of being able to select an artist or song based on the identification code.

Response to Amendment

13. Applicants arguments have been considered but are not persuasive.

In the remarks, the applicant has argued substantially that:

1) Lea in view of Ludtke does not disclose any capability to present information about content, such as artist and song information (Amendment 3/4/04, p. 17 ¶ 3).

Examiner's response:

1) The examiner is at a loss because the examiner only relied upon Lea in view of Ludtke to display the desirability of increasing the original capabilities of legacy devices (Office Action 12/4/03, p. 15, ¶ 4 – p. 16, ¶ 2). Rather, the examiner applies Lea in view of Ludtke, and further in view of Van Der Meulen to disclose the capability to present information about content, such as artist and song information (Office Action 12/4/03, p. 16, ¶ 3 – p. 17, ¶ 1), in which Van Der Meulen discloses, at p. 6 line 52 – p.7 line 4, the ability to obtain detailed content information about each CD, such as the title and the performer of each selection on the CD.

In the remarks, the applicant argues further that:

2) The “analogous environment” allegation, used to combine Van Der Meulen to the system of Lea and Ludtke, relies solely upon the assertion that the Ludtke patent suggests that the “increased functionality” aspect of Ludtke necessarily leads one of ordinary skill in the art to the provision of “artist and song information”. Therefore, since Ludtke does not provide the motivation to present “artist and song information”, that one is also not led to the system of retrieving information discussed in Van Der Meulen. (Amendment 3/4/04, p. 19, ¶ 3 – p. 20, ¶ 1).

Examiner's response:

2) Again, the examiner is at a loss because the examiner has not relied upon the Ludtke patent to suggest that the “increased functionality” aspect of the Ludtke patent

necessarily leads one to the provision of "artist and song information", but rather that Van Der Meulen discloses, at p. 6 line 52 – p.7 line 4, the ability to obtain detailed content information about each CD, such as the title and performer of each selection on the CD, (Office Action 12/4/03, p. 16, ¶ 3 – p. 17, ¶ 1).

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre R. Fowlkes whose telephone number is (703)305-8889. The examiner can normally be reached on Monday - Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (703)305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARF



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